

The invention relates to processes for identifying inhibitors and activators of eukaryotic potassium channels, in which a mutated S. cerevisiae cell is used whose endogenous 5 potassium channels TRK1, TRK2 and TOK1 are not expressed functionally, but which expresses heterologously a eukaryotic potassium channel to be studied. Other subject matters of the invention are mutated S. cerevisiae cells which do not express TRK1, TRK2 and TOK1, and the preparation and use of these mutated S. cerevisiae cells.